EXHIBIT A

Method for Producing UV Polarizers

CROSS REFERENCE TO RELATED APPLICATIONS

Applicants claim priority under 35 U.S.C. §119 of GERMAN Application No. 198 29 970,2 filed JULY 4, 1998. Applicants also claim priority under 35 U.S.C. §120 of PCT/DE99/01783 filed on JUNE 17, 1999. The international application under PCT article 21 (2) was not published in English.

The invention relates to a method for producing UV polarizers in which polarization is effected by dichroitic absorption, and where revolution-ellipsoidal metal particles in a novel arrangement are embedded in the support material, the latter being preferably standard float glass. Said polarizers have a wide absorption range over the UV spectrum. The method uses the metal particles' dichroitic behavior, which undergoes some alterations by specific process steps to embed and treat submicroscopic metal particles within the support material.

Basically, there are several physical principles which can be used to produce plane-polarized light from non-polarized, or part-polarized light.

For instance, when utilizing the double refraction effect to produce plane-polarized light, it is the light's behavior that if in optically anisotropic media the incident light ray does not propagate along the optical axis it is divided into both an extraordinary and an ordinary light ray the polarized wave planes of which are vertically arranged to each other. Examples of application are polarizers that have been known for years such as Nicol prism, Glan Thompson prism, Wollaston prism, etc., whose structure, however, is rather solid (which makes them expensive), and they have an only limited useful surface, and they must be

put very precisely into their working positions, too. Furthermore, their polarizing effect is strongly wave range dependent.

In case of inclined reflection of non-polarized light on transparent isotropic bodies the reflected light ray is part-polarized, with the component whose wave plane is arranged vertically to the plane of incidence being the preferably reflected one. If the angle of incidence is equal to the Brewster angle, the reflected light ray will be completely plane-